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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/194,317	11/24/1998	SIMON J. POWERS	36-1298	3060

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EXAMINER

ANYA, CHARLES E

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 11/28/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/194,317

Applicant(s)

POWERS ET AL.

Examiner

Charles E Anya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2 and 8 - 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,577,328 B2 to Matsuda et al in view of U.S. Pat. No. 6,377,263 B1 to Falacara et al.

As to claim 1, Matsuda teaches an apparatus for providing a virtual environment, the virtual environment arranged to include one or more entities, the or each entity being represented in the virtual environment by at least a dynamic entity-model and a visual entity-model, each of the entity models being mutually independent ("...downloaded..." Col. 9 Ln. 38 – 67) the apparatus comprising a server apparatus arranged to provide one or more dynamic entity-models ("...VRML content/autonomous movement (Behavior)..." Col. 9 Ln. 22 – 67, "...growth parameter control table..." Col. 10 Ln. 8 – 39), one or more client apparatus, the or each client apparatus arranged to provide a visual-model manager, the visual-model managers each arranged to provide visual entity-model ("...VRML 2.0 Browser/Community Place Browser..." Col. 9 Ln. 18 – 63) and communications apparatus arranged to allow transmission of messages between the conceptual-model manager, the one or more dynamic-model managers

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and said one or more visual-model managers (LAN/Internet 7/Router 8 Col. 8 Ln. 36 – 67).

Although Matsuda teaches VRML content/file that includes dynamic and conceptual entity-models and resides in a server apparatus the teaching of conceptual entity-model is not explicit.

Falacara teaches conceptual entity-model (“Behaviors...” Col. 7 Ln. 44 – 67). It would have been obvious to apply the teaching of Falacara to the system of Matsuda. One would have been motivated to make such a modification in order to define an action a component (avatar) can perform (Col. 7 Ln. 44 – 46).

As to claim 2, Matsuda teaches the server apparatus as arranged to provide a plurality of dynamic-model managers and the plurality of dynamic-model managers are distributed across a plurality of independent servers (AO Servers 13 and 14 Col. 13 Ln. 66 – 67, Col. Ln. 1 – 23).

As to claim 8, Matsuda teaches the execution of the dynamic-model manager from a compiled language whereas the conceptual-model manager is executed from an interpreted language (“...script...” Col. 7 Ln. 1 – 10, “...Java...C...Visual Basic...” Col. 7 Ln. 41 – 48).

As to claims 9 - 13, see the rejection of claim 1.

Claims 3 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,577,328 B2 to Matsuda et al. in view of U.S. Pat. No. 6,377,263 B1 to Falacara et al. as applied to claim 1 above, and further in view of Distributed

**Virtual Reality for Everyone --- a Framework for Networked VR on the Internet
(page 1 – 8) to Broll.**

As to claim 3, Matsuda as modified is silent with respect the virtual environment is divided into mutually exclusive zones and one or more zone managers, each zone manager being arranged to provide dynamic entity-models in an associated zone.

Broll teaches the virtual environment as being divided into mutually exclusive zones (“...cell boundaries...” page 7 section 4.2, “...self contained...” page 8 column 1 lines 1 - 2) and one or more zone managers, each zone manager being arranged to provide dynamic entity-models in an associated zone (AOIM page 7 section 4.2). One would have been motivated to make such a modification manage the visible cells around the current viewpoint of the user (page 7 section 4.2).

As to claim 4, Matsuda is silent with respect to a virtual environment manager arranged to associate ones of the zone manager(s) with ones of the zones in response to the behavior of dynamic entity-models.

Broll teaches a virtual environment manager arranged to associate ones of the zone manager(s) with ones of the zones in response to the behavior of dynamic entity-models (MUD page 7 section 4.2). It would have been obvious to apply the teaching of Broll to the system of Matsuda. One would have motivated to make such a modification in order to assign appropriate multicast group and port to individual cells managed by AOIM (page 7 section 4.2).

As to claim 5, see the rejection of claim 4.

As to claim 6, Matsuda teaches at least one of the client apparatuses as being associated with an avatar entity (“...virtual pet...” Col. 11 Ln. 19 – 35).

Matsuda is silent with respect to at least one client apparatus being arranged to receive messages from the zone managers associated with both the zone in which the avatar entity is located and the zones neighboring the zone in which the avatar entity is located.

Broll teaches at least one client apparatus as being arranged to receive messages from the zone managers associated with both the zone in which the avatar entity is located and the zones neighboring the zone in which the avatar entity is located (“...participants...user...” page 7 section 4.2). It would have been obvious to apply the teaching of Broll to the system of Matsuda. One would have been motivated to make such a modification to allow update message filtering (page 7 section 4.2).

As to claim 7, Matsuda as modified is silent with reference to providing a multicast address that is associated with each zone manager.

Broll teaches providing a multicast address that is associated with each zone manager (AOIM page 7 section 4.2). It would have been obvious to apply the teaching of Broll to the system of Matsuda as modified. One would have been motivated to make such a modification manage the visible cells around the current viewpoint of the user (page 7 section 4.2).

Response to Arguments

2. Applicant's arguments with respect to claims 1 - 13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (703) 305-3411.

The examiner can normally be reached on M-F (8:30-5:30) First Friday off.

The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Charles E Anya
Examiner
Art Unit 2126

cea



JOHN FOLLANSBEE
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